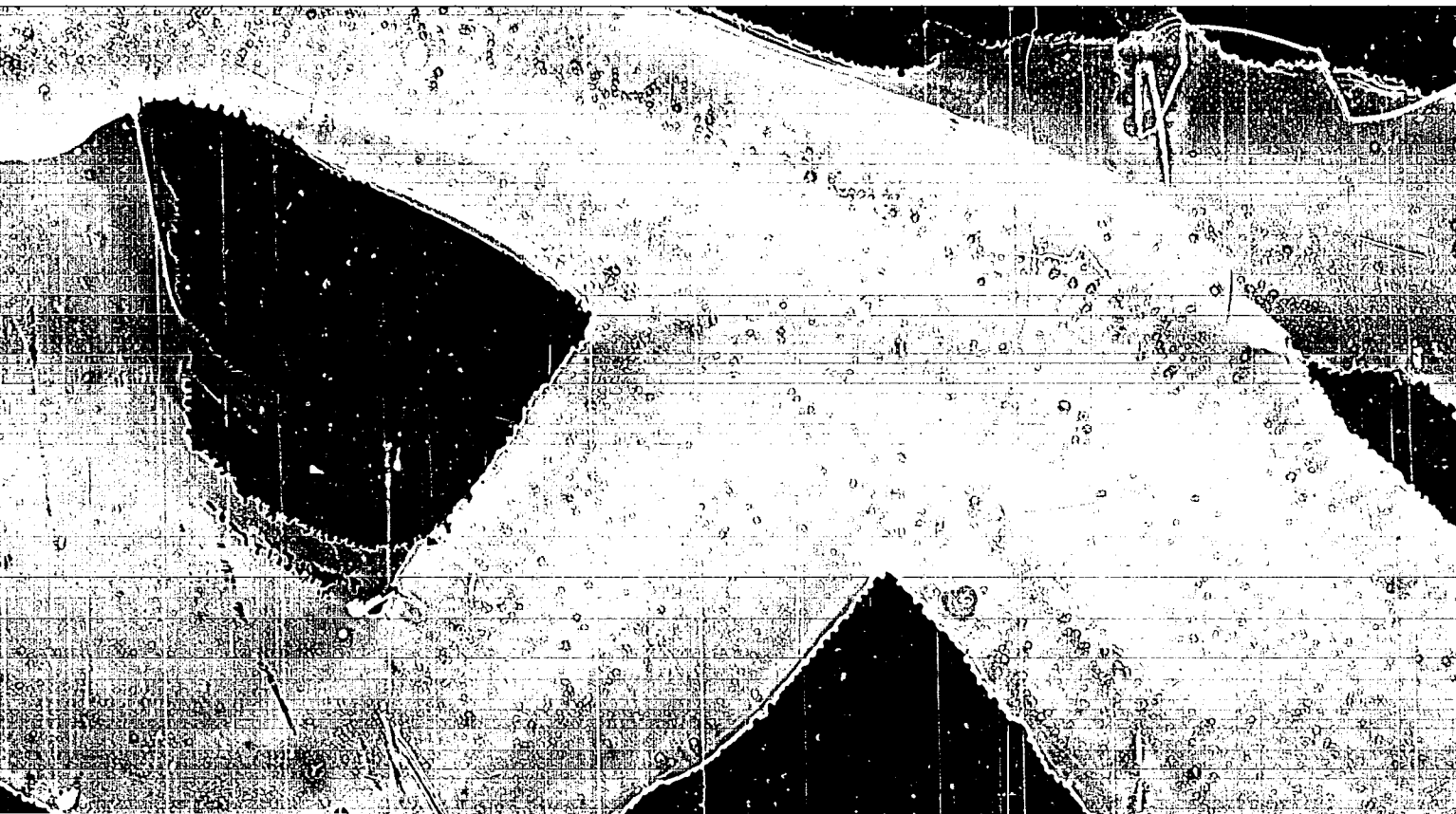


"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000101810001-9

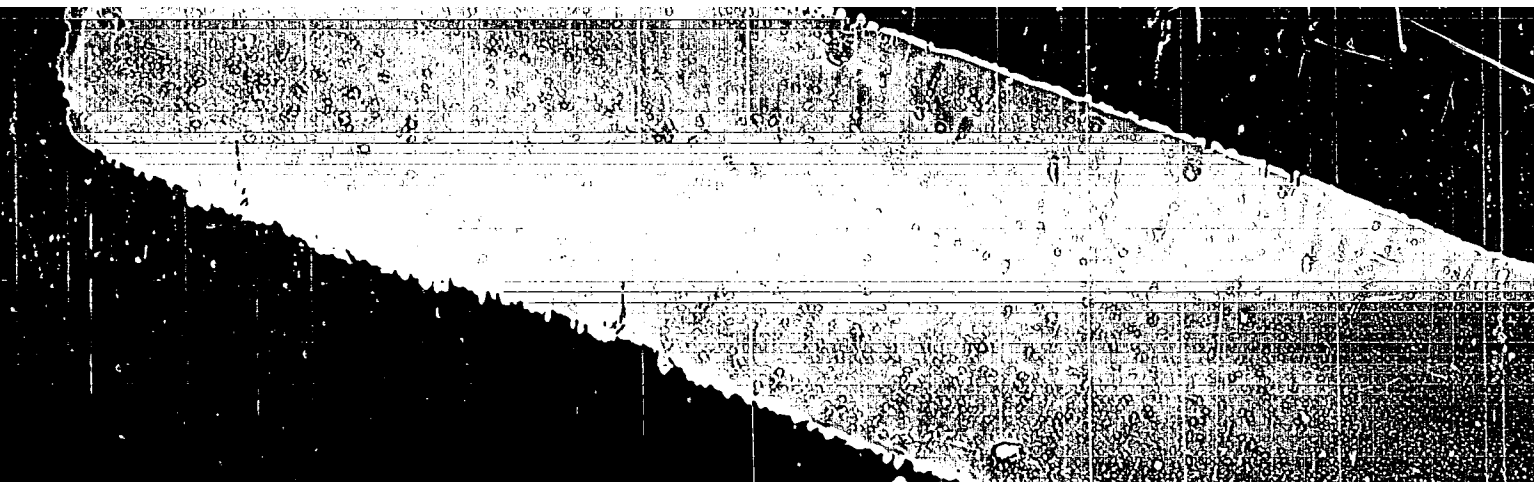


APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000101810001-9"

**"APPROVED FOR RELEASE: 06/19/2000**

**CIA-RDP86-00513R000101810001-9**



**APPROVED FOR RELEASE: 06/19/2000**

**CIA-RDP86-00513R000101810001-9"**

ANTONOV, P.K.

Ammeter switch. Energetik 3 no.5:15-16 0 '53.

(MLRA 6:10)  
(Ammeter)

SHEKHETS, V.P.; LITYUGA, V.S.; ANTONOV, P.K.; KHLEVNYUK, S.S.

Semiautomatic machine for testing disk springs. Mashinostroitel'  
no.7:10 J1 '63. (MIRA 16:9)  
(Springs (Mechanism)--Testing)

LITVINOV, N.N. (Velikiye Luki); ANTONOV, P.K. (Ul'yanovskaya oblast');  
CHERNOV, V.M. (Magnitogorsk); PETROV, V.P. (Leningrad)

Terminology and concepts of elementary algebra. Mat. v shkole no.  
5:59-65 S-0 '63. (MIRA 16:11)

MAKOVSKIY, Veniamin L'vovich, doktor tekhn.nauk; KAKHANOV, Georgiy Semenovich, insh.; LYASHENKO, Dmitriy Nikolayevich, insh.; ANTONOV, P.L., insh., red.; SOROKIN, N.N., insh., red.; KHITROV, P.A., tekhn.red.

[Tunnel and subway construction abroad] Sooruzhenie tonnelei i metropolitenov sa ruboshom. Moskva, Gos. transp. shel-dor. izd-vo 1957. 147 p. (Babushkin, Vsesoiuznyi nauchno-issledovatel'skii institut transportnogo stroitel'stva, Trudy, no.26) (MIRA 11:6)  
(Tunnels) (Subways)

Antony, P. L. "Fundamentals of the Hydrocarbon Method of Prospecting for Oil (The Gas Survey)." *Sotsial'naya Nauka i Tekhnika*, Tashkent, No. 5, 1937, pp. 5-19.

ANTOIDV, P.L.

Diffused permeability of some argillaceous rock. Geokhin.net.poisk.  
nefti i gaza no.2:39-55 '54. (MLRA 9:10)

(Clay) (Permeability) (Rocks)



ANTONOV, P.L.; BOTNEVA, T.A.; YEREMENKO, N.A.; ZHABREV, D.V.; SUBBOTA,  
M.I.; TURKEL'TAUB, N.M.; IASENEV, B.P.

Present status of oil and gas geochemical prospecting methods.  
Trudy VNIIGNI no. 10:227-240 '58. (MIRA 14:5)  
(Geochemical prospecting)

ANTONOV, P.L.

Studying the distribution of gas in rocks as related to depth.  
Trudy VNIONI no. 10:241-256 '58. (MIRA 14:5)  
(Geochemical prospecting) (Gas, Natural—Geology)

ANTONOV, P.L.; GLADYSHEVA, G.A.; KOZLOV, V.P.

Diffusion of hydrocarbon gases through rock salt. Geol. nefi 2 no.2:  
47-49 P '58. (MIRA 11:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologo-razvedochnyy nefiyanoy institut.

(Gas, Natural) (Rock salt) (Diffusion)

6  
SOKOLOV, Y. A.; ZHUKH, T. P.; VAINOYLICH, N. N.; ANTONOV, P. L.; GRIGOR'YEV, O. O.  
and KOZLOV, V. P.

**"Migration processes of Gas and Oil, their Intensity and Directionality."**

Abstract. The article gives a description of the processes of migration of oil and gas, their intensity and direction in various stages of the existence of sedimentary rocks. In the early stages of the formation of sedimentary rocks the processes of migration cause a removal of excess gases into aqueous medium and into the atmosphere as well as a primary accumulation of free gases in sediments and their solutions in underground waters.

During oil and gas accumulation and the formation of their deposits the following processes play the main part: transfer of oil in a dissolved state both in compressed gases and in the water, a removal of dissolved gas and oil components from the water, condensation of liquid hydrocarbons from gases at decreasing temperature and pressure and then oil and gas buoyancy in porous waterbearing beds and rock mass.

The oil and gas pool formed undergo dissemination due to the processes of filtration, diffusion as well as due to the solution and removal of gas and oil by the water surrounding their pools.

The processes of filtration are found to be most intensive during tectonic shifts and they can cause the degassing of a pool within a short period of time.

report to be submitted for the 6th World Petroleum Congress, Frankfurt, West Germany, 19-26 June 1963

Gas anomalies observed on various levels of a section and in surface layers above oil and gas pools testify to the vertical migration of gases and to continuous processes of dissemination of oil and gas pools.

Diffusion coefficients D, for various types of rocks studied vary between  $10^{-4}$  -  $10^{-2}$  cm<sup>2</sup>/sec. In some cases one can observe the dying of diffusion of the low values of D.

At "D" equal to  $10^{-4}$  -  $10^{-2}$  cm<sup>2</sup>/sec. the dissemination of gas pools by stationary diffusion alone is so great that their preservation within geologic time can be explained by the unsteadiness of the process and by the phenomena of the dying out of the diffusion reducing gas losses as well as by the recent, in a geologic sense, formation of these pools or by a continuous replacement of the gas due to its inflow from deeper beds.

Considering the problem of the time of the formation of gas accumulations one should take into account not only the age of a trap but also the amounts of possible gas losses.

ANTONOV, P.L.

Range and duration of the diffusion of gases from pools into  
edge waters. Gaz. prom. 8 no.9:1-6 S '63. (MIRA 17:8)

ANTONOV, Petr Mikhaylovich, master sports SSSR; STASEVICH, R.A., red.;  
FILINONOV, I.M., red.; KARYAKINA, M.S., tekhn.red.

[Methodology in training of parachutists] Veoprosy metodiki  
obucheniia parashiotista-sportsmena. Moskva, Izd-vo DOSAAF,  
1959. 183 p. (MIRA 13:4)

(Parachuting)

ANTONOV, P.M., polkovnik, voyenny letchik pervogo klassa

Flight directors study. Vest.Vozd.Fl. no.11:33-38 N '60.  
(MIRA 13:11)

(Air traffic control)

S/115/60/000/06/05/031  
B007/B014

AUTHORS: Vysotskiy, A. V., Antonov, P. P., Kurochkin, A. P.

TITLE: An Instrument for Automatic Compensation of the Temperature Error in Measurements of Length

PERIODICAL: Ismeritel'naya tekhnika, 1960, No. 6, pp. 9-10

TEXT: This is a description of an instrument developed by the Byuro vzaimosamenyaimosti (Bureau of Interchangeable Manufacturing) for automatic compensation of the temperature error (types EB-1029 (BV-1029) and EB-1087 (BV-1087)). It is used for a simple and reliable pneumatic measurement of length. Small-size thermistors of the type EMT-1 (YeMT-1), attached to the workpiece to be tested or to the gauge of the measuring instrument, serve as sensitive elements. The two thermistors are connected to the branches of a self-balancing bridge (Fig. 1). The dimensions of the workpiece are measured by means of a pneumatic differential instrument (Fig. 2). Within a certain temperature range, the indications of the instrument depend only on the size of the workpiece which is kept at a constant temperature. The applicability of this instrument was experimental-

Card 1/2



YEREMENOK, P.L., kand.tekhn.nauk; YEKSAREV, A.D., arkhitekt; KOMYSHEV, A.V.,  
insh.; ANTONOV, P.V., insh.; KHOTORYANSKIY, D.L., insh.; SOLONINKO,  
I.S., kand.geol.-minerl.nauk; KOZAKOV, A.I., insh., red.; MOISEYEVA,  
N.V., otvetstvenny' za vypusk

[Specifications for making, designing, and using saved limestone  
wall blocks] Tekhnicheskie ukazaniia na proizvodstvo, proektirovanie  
i primeneniie v stroitel'stve krupnykh stenovykh blokov iz pil'nykh  
izvestniakov. Kiev, Biuro tekhn.pomoshchi NIIK ASIA USSR, 1958.  
82 p. (MIRA 12:2)

1. Ukraine. Ministerstvo stroitel'stva. Tekhnicheskoye upravleniye.  
2. Odesskiy inzhenerno-stroitel'nyy institut (for Antonev). 3. Insti-  
tut stroyaterialov Akademii stroitel'stva i arkhitektury USSR (for  
Soloninko).

(Building blocks) (Limestone)

ALEKHIN, F.K.; ALOTIN, L.M.; ALTAYEV, Sh.A.; ANTONOV, P.Ye.;  
BEVZIK, Yu.Ya.; BELEN'KIY, D.M.; BRATCHENKO, B.F.,  
gornyy inzh.; BRENNER, V.A.; BYR K... V.F.; VAL'SHTEYN,  
G.I.; YERMOLENOK, N.S.; ZHISLIN, I.M.; IVANOV, V.A.;  
IVANCHENKO, G.Ye.; KVON, S.S.; KODYK, G.T.; KREMENCHUTSKIY,  
N.F.; KURDYAYEV, B.S.; KUSHCHANOV, G.K.; MASTER, A.Z.;  
PREOBRAZHENSKAYA, Ye.I.; ROZENTAL', Yu.M.; RUDOY, I.L.;  
RUSHCHIN, A.A.; RYBAKOV, I.P.; SAGINOV, A.S.; SAMSONOV,  
M.T.; SERGAZIN, F.S.; SKLEPCHUK, V.M.; USTINOV, A.M.;  
UTTS, V.N.; FEDOTOV, I.P.; KHRAFKOV, G.Ye.; SHILENKOV, V.N.;  
SHINAYDMAN, M.I.; BOYKO, A.A., retsenzent; SUROVA, V.A.,  
ved. red.

[Mining of coal deposits in Kazakhstan] Razrabotka ugol'-  
nykh mestorozhdenii Kazakhstana. Moskva, Nedra, 1965. 292 p.  
(MIRA 18:5)

POLOVNEV, G.P.; SULIMOV, G.K.; ANTONOV, P.Ye.

Flow with an active cutter for cutting tough coal. Nauch. trudy  
KNIUI no. 11:331-336 '62. (MIRA 17:7)

S/627/60/002/000/006/027  
D299/D304

3.2410 (2205, 2705, 2805)

AUTHORS: Antonov, R. A., Smorodin, Yu. A., and Tulinova, Z. I.

TITLE: Air showers at an altitude of 9-12 km

SOURCE: International Conference on Cosmic Radiation. Moscow, 1959. Trudy. v. 2. Shirokiye atmosferye livni i kas-kadnyye protsessy, 101-106

TEXT: The density spectrum of extensive air showers was studied by means of hodoscoped counters, whose disposition is shown in a figure. In one of the experiments, a system of ionization chambers operated in conjunction with the hodoscope. In order to obtain the density spectrum of the showers, the mean density  $\rho$  of a shower was determined at all the counters jointly. Such a method of determining  $\rho$  reduces the effect of local electron-density fluctuations. The passage from the distribution according to the number of operating counter  $I_{40}^m$  to the density spectrum, was effected by means of the integral equation

Card 1/4

Air showers at an ...

31524

S/627/60/002/000/006/027

D299/D304

$$I_{40}^m = \int_0^{\infty} C_{40}^m (1 - e^{-\rho\sigma})^m e^{-\rho\sigma(40-m)} \frac{dH}{d\rho} d\rho$$

4

where  $\sigma$  is the area of a counter and  $dH/d\rho$  - the sought for differential density-spectrum; taking as the zeroth approximation

$dH/d\rho = f(\sigma\rho)(\sigma\rho)^{-2.5}$ , one obtains

$$I_{40}^m = f(\sigma\rho)_{\max} \int_0^{\infty} (\sigma\rho)^{-2.5} (1 - e^{-\rho\sigma})^m e^{-\rho\sigma(40-m)} d(\sigma\rho) = f(\sigma\rho)_{\max} S(m)$$

A figure shows the differential density-spectra for showers at sea

Card 2/4

Air showers at an ...

3152h  
S/627/60/002/000/006/027  
D299/D304

level and at altitudes of 9 and 12 km. The showers were divided into 3 groups, according to the electron-density recorded at the center of the apparatus. It was found that the distribution of the shower axes is little affected by changes in shower intensity. In the following it is assumed that at altitudes of 9 and 12 km, the lateral distribution of electrons is expressed (in the mean) by Nishimura's function. A comparison of experimental and theoretical values showed good agreement. It was found that the lateral distribution of electrons in extensive air showers changes with altitude. The mean energy of the electron-photon component was determined by the ionization chambers, simultaneously with hodoscope recordings. Further, the integral particle-spectra of the showers were obtained for the interval  $5 \cdot 10^5 \leq N \leq 5 \cdot 10^7$ . On the basis of the integral spectra, the energy spectra of the primary particles were calculated; thereby, very simple assumptions were made. The results are listed in a table. There are 4 figures, 5 tables and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: K. Kamata, J. Nishimura. Suppl. of Progr. Theor. Phys., no. 6, 93, 1958.

Card 3/4

Air showers at an ...

31524  
S/627/60/002/000/000/027  
D299/D304

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR (Physics Institute im. P. N. Lebedev AS USSR); Nauchno-issledovatel'skiy institut yadernoy fiziki MSU (Scientific Research Institute of Nuclear Physics Moscow State University) 4

Card 4/4

ANTONOV, R. A. and TULINOVA, Z. I. and SMORODIN, Yu. A.

"Experimental Data on Development of Extensive  
Air Showers in Upper Atmosphere"

Report presented at the International Conference on Cosmic Rays  
and Earth Storm, 4-15 September 1961, Kyoto, Japan.

PN. Lebedev Institute of Physics, Moscow, USSR



R. A. ANTONOV, Yu. A. SMORODIN, Z. I. TULINOVA

Evolution of vertical EAS in the upper atmosphere

report submitted for the 8th Intl. Conf. on Cosmic Rays (IUPAP), Jaipur India,  
2-14 Dec 1963

ACCESSION NR: AP4009107

S/0056/63/045/006/1865/1874

AUTHORS: Antonov, R. A.; Smorodin, Yu. A.; Tulinova, Z. I.

TITLE: Altitude variation of vertical extensive air showers in the upper part of the atmosphere

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 45, no. 6, 1963, 1865-1874

TOPIC TAGS: extensive air shower, cosmic rays, cosmic radiation, air shower flux, vertical air shower flux, shower particle lateral distribution, Gross transformation, particle number spectral exponent, cascade parameter, electron photon component

ABSTRACT: Experiments have been performed in the upper part of the atmosphere to obtain data on the fluxes and spectra of vertical extensive air showers and also on the lateral distribution of the shower particles. Another purpose of the investigations was to check on the validity of the generalized Gross transformation for vertical showers, to check the particle-number spectral exponent, and to determine the cascade parameter. The experimental counter array used

Card 1/12

ACCESSION NR: AP4009107

for the purpose is described. The altitude variation of showers with  $\sim 10^6$  particles, obtained on the basis of the experimental results, indicates that the particles with energy  $\sim 10^{15}$  eV, which initiate these showers, experience a high energy dissipation in the interactions. A considerable fluctuation in the mechanism of energy transfer in the electron-photon component of the shower is also indicated. "The authors take the opportunity to express deep gratitude to S. N. Vernov for help with the research." Orig. art. has: 8 figures, 15 formulas and 2 tables.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva AN SSSR  
(Physics Institute, AN SSSR)

SUBMITTED: 21Jun63

DATE ACQ: 02Feb64

ENCL: 01

SUR CODE: PH

NO REF SOV: 009

OTHER: 009

Cord

2/12

ACCESSION NR: AP4012519

S/0056/64/046/001/0028/0035

AUTHOR: Antonov, R. A.; Smorodin, Yu. A.; Tulinova, Z. I.

TITLE: Production of high energy Gamma quanta in extensive air showers with energies  $10^{14}$ -- $10^{15}$  eV in the upper third of the atmosphere

SOURCE: Zhurnal eksper. i teoret. fiz., v. 46, no. 1, 1964, 28-35

TOPIC TAGS: pion generation, extensive air showers, high energy photon production, electron photon cascade, electron photon component, shower size, shower particle density, air shower size, air shower particle density, extensive air shower size, Landau theory, Heisenberg model, Heisenberg fire ball model, pion generation multiplicity

ABSTRACT: In order to obtain data on the generation of pions in interactions at energies exceeding  $10^{14}$  eV, for which only indirect

Card 1/3

ACCESSION NR: AP4012519

data are presently available, the authors registered the electron photon cascades initiated by  $\gamma$  quanta produced in extensive air showers with  $10^5$ -- $10^6$  particles. The experiments were performed with apparatus described elsewhere (ZhETF v. 45, 1865, 1963) at air pressures 887 and 311 g/cm<sup>2</sup>, in the  $\gamma$ -quantum energy range  $10^{12}$ -- $10^{13}$  eV. Electron photon cascades with energy above  $7 \times 10^{11}$  eV were registered. The size of the shower was determined simultaneously by registering the particle density in the shower at several points. The multiplicity of pion generation, calculated on the basis of these data for interactions of particles of energy  $\sim 10^{15}$  eV, exceeds noticeably the value predicted by the Landau theory. The degree of energy dissipation agrees more closely with the Heisenberg fire-ball model. "The authors take the opportunity to express deep gratitude to S. N. Vernov for help with the research, and to M. V. Solov'yev for operating the ionization set-up." Orig. art. has: 3

Card 2/3

\*ACCESSION NR: AP4012519

figures, 8 formulas, and 4 tables.

ASSOCIATION: Fizicheskiy Institut im. P. N. Lebedeva AN SSSR  
(Physics Institute, AN SSSR)

SUBMITTED: 21Jun63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: PH

NO REF SOV: 006

OTHER: 000

Card 3/3

L 21811-65 ENG(J)/ENT(N)/FSC/T IJP(o)

ACCESSION NR: AT4049950

S/2504/64/026/002/0142/0165

19  
17  
11

AUTHOR: Antonov, R.A.; Smorodin, Yu. A.; Tulinova, B.I.

TITLE: Experimental data on the development of extensive air showers in the upper half of the atmosphere

SOURCE: AN SSSR, Fizicheskii Institut. Trudy\*, v. 26, 1964. Kosmicheskiiye luchy (Cosmic rays), 142-165

TOPIC TAGS: air shower, upper atmosphere, gamma quantum, electron photon cascade, Landau theory, Heisenberg fireball

ABSTRACT: Two questions are resolved on the basis of experimental data: the height dependence of vertical extensive air showers and the formation of  $\gamma$ -quanta in extensive air showers. A discussion of the first question contains sections entitled: 1. methods of measuring vertical showers; 2. density spectra of extensive air showers; 3. global height dependence and height dependence of vertical extensive air showers; 4. radial distribution of particles in showers; 5. height dependence of vertical showers with a given number of particles. The discussion of the second question has sections entitled: 1. electron-photon cascades in extensive air showers; 2. calculation of the total number of high-energy

Card 1/3

I. 24814-65

ACCESSION NR: AT4049933

**γ**-quanta in extensive air showers of a given power; 3. experimental results; 4. spectra of high-energy **γ**-quanta in extensive air showers of a given power. The following conclusions are drawn: 1. The degree of energy dissipation in the formation of pions by nuclear interactions contributing at the outset to showers with energies of about  $10^{16}$  eV is high. The major portion of the energy is given over to pions with energies of about  $10^{12}$  eV. This is evidenced both by data on the average number of **γ**-quanta with energies  $E > 10^{12}$  eV in the atmosphere in layers of 177 and 311 g cm<sup>-2</sup>, and by the maximum height of showers with  $N > 10^6$ ; 2. The degree of energy dissipation is significantly higher than predicted by the Landau theory and close to the maximum value which follows from the Heitler model; 3. There are fluctuations in the mechanism of energy transfer to the electron-photon component of the shower. This is evidenced by the significant extent of the maximum of the vertical variation of showers with  $N > 10^6$ . It is advisable that the average characteristics of extensive air showers in the upper third of the atmosphere be studied since cascade development of showers contributes little at these heights and hence, experimental characteristics can be compared directly with characteristics of high-energy nuclear interactions contributing at the outset of the shower. "The authors express thanks to E. N. Bercov for help in conducting the study. The work on ionization was carried out by M. V. Solov'yev." Orig. art. has: 20 figures, 6 tables and 17 formulas.

Card 2/3



L 2401h-65

ACCESSION NR: AT4049083

ASSOCIATION: Fizicheskly Institut AN SSSR (Physics Institute, AN SSSR) 0

SUBMITTED: 00

ENCL: 00

SUB CODE: AA

NO REF SOV: 016

OTHER: 010

Card 3/3

BRUNOV, E. V. IZOBRAZHENIYE D.A., TULIN...

Production of high-energy  $\gamma$ -quanta in extensive air showers  
with a momentum of  $10^{15}$  eV in the upper layer of the  
atmosphere. Izv. AN SSSR. Ser. Fiz. 28 no.11.1896-1898  
N° 64.

(MIRA 10112)

1. Fizicheskiy Institut im. P.N. Lebedeva AN SSSR i Nauchno-  
issledovatel'skiy Institut yadernoy fiziki Khar'kovskogo  
gosudarstvennogo universiteta.

L 4474-16 EWI(1)/EWT(m)/FCC/T/EWA(h) IJP(c) GW

ACC NR: AP3024645

SOURCE CODE: UR/0028/65/029/009/1728/1730

AUTHOR: Antonov, R.A.; Smorodin, Yu.A.; Tulinova, A.I.

ORG: none

TITLE: On the width of the maximum of the altitude dependence curve for extensive air showers /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

23  
B

19

SOURCE: AN SSSR. Investiya. Seriya fizicheskaya, v. 29, no. 9, 1968, 1723-1730

TOPIC TAGS: primary cosmic ray, secondary cosmic ray, extensive air shower, nucleon interaction, inelastic interaction

ABSTRACT: Using recent experimental data from several sources on the absolute incidence rates of extensive air showers of different strengths at different altitudes, the authors have constructed isoincidence curves for rates of 10-9, 10-10, and 10-11 shower axes/cm<sup>2</sup> sec sterad on a log N versus t plot (N is the number of particles in the shower and t is the depth in the atmosphere). If there were no fluctuations in the shower development process, these curves would represent the development in the atmosphere of showers of different strengths. The fluctuations are discussed and it is concluded that they are not more significant than the ~ 30 % experimental error. The isoincidence curves are characterized by broad maxima, which extend nearly from

Card 1/2

09010313

L 4474-66

ACC NR: AP8024848

200 to 700 g/cm<sup>2</sup>. Recent experimental data from a number of sources on the atmospheric depth of maximum development of extensive air showers of different energies are compared with theoretical calculations. The fact that the maximum development can occur at depths as small as 200-300 g/cm<sup>2</sup> shows that there must be interactions in which the energy is widely distributed among secondary particles. The energy dependence of the depth of maximum development, at least for energies up to  $5 \times 10^{18}$  eV, does not agree with the predictions of purely electromagnetic cascade theory, as asserted by K. Kamata, K. Murakami, and S. Kawasaki (International Conference on Cosmic Rays, Vol. 4, Jaipur, 1963), but is consistent with those of nuclear cascade theory. Orig. art. has 2 figures and 1 table.

SUB CODE: NP/ SUBM DATE: 00/

ORIG REF: 010/ OTH REF: 007

BC  
Card 2/2

ACC NR: AP6013282 (A) SOURCE CODE: UR/0413/66/000/008/0079/0079

INVENTOR: Borisov, M. F.; Molchanov, B. V.; Antonov, R. P.

ORG: none

TITLE: Preparation of chlorinated polyorganosiloxanes Class 30, No. 190798<sup>15</sup>

SOURCE: Izobreteniya, promyshlennyye obraztsey, tovarnyye znaki, no. 8, 1966, 79

TOPIC TAGS: polyorganosiloxane, organosilicon monomer, *chlorinated organic compound*

ABSTRACT: This Author Certificate introduces a method for preparing chlorinated polyorganosiloxanes by hydrolytic polycondensation of organosilicon monomers. In order to conduct both the hydrolysis and halogenation simultaneously, the hydrolytic condensation is performed in the presence of an oxidizer such as hydrogen peroxide. [LD]

SUB CODE: 11/ SUBM DATE: 17Nov64/

Card 1/1

UDC: 678.84.944:543.938

ANTONOV, S.

Increasing the output of meat and meat products. Mias. ind. SSSR no.2:  
1-5 '57. (MIRA 10:5)

1. Ministr promyshlennosti myasnykh i molochnykh produktov SSSR.  
(Meat industry)

ANTONOV, S.

Expedite and improve preparation of dairies for the new season, Mol. prom, 13,  
No. 2, 1952.

SO: MLRA. May 1952

ANTONOV, S.

USSR (600)

Butter

Work of the butter industry in 1951 and tasks for 1952. Mol. prom. 13, no 5,  
May 1952

9. Monthly List of Russian Accessions, Library of Congress, August 1953, Uncl.  
2



1. ANTONOV, S.
2. USSR (600)
4. Machine-Tractor Stations
7. Carrying out repair work in an organized fashion. MTS No. 12 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

ANTONOV, S.

"Wages and work organization in mines" by I.N.Kaminskii. Reviewed  
by S.Antonov. Sov.shakht. 11 no.1:4) Ja '62. (MIRA 1/1:2)  
(Wages--Coal miners)

ANTONOV, Sergey Anatol'yevich, slesar' udarnik Kommunisticheskogo truda

Communism is our cause. Voen. vest. 41 no.11:10-11 N 161.

1. Moskovskiy elektromashinostroitel'nyy zavod imeni Vladimira  
Il'icha. (MIRA 16:11)

ANTONOV, S. [L.R.]

PA 06/49731

USSR/Engineering  
Ships, Electrical Installations  
Drives, Electric

Jun 48

"Ships With Electric Drive and Prospects for  
Their Development in the USSR," S. Antonov,  
Elec Engr, 3 1/2 pp

"Morskoy Flot" No 6

Plea for a Diesel-electric merchant fleet. [Some  
of Antonov's contentions are highly questionable  
and editor invites comment.] Mentions electric  
ship "Molotov" used on Crimea-Caucasus run.

~~744~~  
23/49731

ASHCHENILOV, Vladimir Petrovich; ANTONOV, S.I., inzh., spetsred.; FRIEDMAN,  
Z.S., red.isd-va; KOTLYAKOVA, O.I., tekhn.red.

[Repairing the electrical equipment of ships] Remont elektro-  
oborudovaniia sudov. Leningrad, Izd-vo "Morskoi transport,"  
1959. 237 p. (MIRA 12:12)  
(Electricity on ships--Maintenance and repair)

ANTONOV, S.I., Inzh.

Modern gyroscopic instruments and prospects of their development.  
Trudy MAI no.161:128-137 '65. (MIRA 18:9)

ANTONOV, S.I., insh.

Justification for use at the present time of electric  
ship propulsion. Trudy NTO sud.prom. 8 no.5:19-32  
(MIRA 13:7)  
(Ship propulsion, Electric)  
(Marine diesel engines)

ANTONOV, Sergey Ivanovich, inzh.; Primal uchastiyе ITSKOVICH,  
Yuriy Leonidovich, PIRK, A.O., red.

[Diesel-electric motorships] Dizel'-elektrokhody. Moskva,  
Transport, 1964. 307 p. (MIRA 17:8)



ANTONIS, S.M.  
CA

9

Use of bronze substitutes in cast bearings for the plate  
mills. N. I. Hlinov and S. M. Antonov. (Zol. Vol. 9,  
No. 9, 24-25 (1981); Chem. Zvest. 1981, 1, 3573. Bronze  
containing (1) Ni 3%, (2) Ni 2.5-3.0 and Pb 1-2%, or (3) Ni  
2.5-3.0 and Mn 1-1.5% and brass containing Mn 3 and Zn 20  
25% were substituted in the plate mill bearings for bronze  
containing Sn 10-12 and Pb 5-15%. The brass showed the  
best superiority in service with a tensile strength at room  
temp. and at 250° of 25.7 and 22.0 kg/cm<sup>2</sup>, resp.,  
compared to 21.5 and 20.0 kg/cm<sup>2</sup> for Sn-Pb bronze.  
H. W. Rathmann

ADD TO A INTERNATIONAL LITERATURE CLASSIFICATION

12

ANTONOV, S. M.

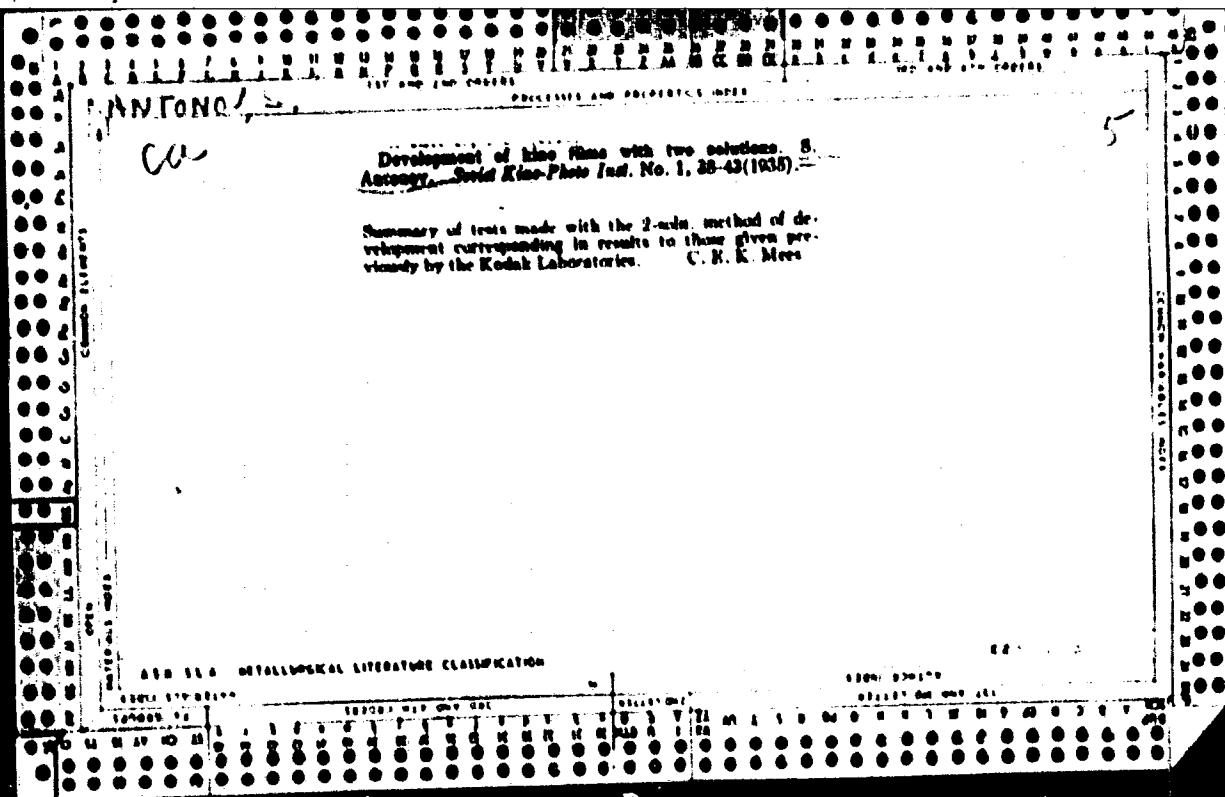
"Investigation of the Properties of High Chromium Ferrous Carbon Alloys and Their Application in the Casting of Mining and Metallurgical Equipment." Cand Tech Sci, Sverdlovsk Mining Inst imeni V. V. Vakhrushev, Min Higher Education USSR, Sverdlovsk, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: Sum. No. 556, 24 Jun 55

RODZEVICH, N.V., inzh.; ANTONOV, S.M., inzh.

Lengthening the life and reducing the weight of axle-box roller bearings. Trudy VNITI no.16:50-67 '62. (MIRA 17:1)



ANTONIO, S.M.

5

Repeated printing of motion pictures by reversal. S. M. Antonio. *Kinematograph*. From 1939, No. 9, 39-45. — It was determined how many duplicates could be made, each from the preceding, by reversal on Perutz 16-mm. film. The characteristics of the different stages of reversal were measured systematically, with the developers and bleaching solutions recommended by the manufacturer. The following were noted: the neg. and pos. characteristics of Perutz film; the effect of the duration of the 2nd development with a full 2nd exposure; the effect of the duration of the 2nd exposure with full 2nd development; and the effect of the duration of the 2nd development with selected 2nd exposures. In the reversal curve, as in the neg. curve, the gamma increases only up to 4 min. and reaches a value of 2.72. The magnitude of the 1st exposure does not affect the gamma. The max. and min. d.s. of the reversal curve decrease with an increase of the time of 1st development. If the 1st exposure is increased, the max. and min. d.s. of the neg. curve increase, while they decrease in the reversal curve; however, the neg. curve is not sym. with the reversal curve. The optimal time of 1st development lies between 4 and 8 min. Curves are shown. The resolving power of Perutz film is 80 lines/mm. The sensitivity of the film is the same as that of Kodak lantern or pos. film. The duration of the 2nd

development with full 2nd exposure affects reversal only up to 3 min. Changes of the 2nd exposure between 1 and 20 sec. affect the sensitometric characteristics. Exposure to ultraviolet light decreases the gamma, and this cannot be remedied by varying the developing time. The sharpness of the image increases considerably with increasing exposure to W light; however, the graininess is very noticeable. By this method not more than 4 duplicates can be obtained. This corresponds to an approx. keeping period of 20 years. In another method, due to Boyd (*Rev. J. Phys.* 7B, 721 A, 1951), the 2nd "development" is by means of Na<sub>2</sub>S. A gamma of 1.0 is obtained by development for 10 min. in the 1st developer. The gamma increases in successive duplicates, while the max. and min. d.s. of all duplicates remain almost the same. The consequent great increase in contrast may be caused by the brownish red color of the reversed film. The detail gradually becomes worse and the graininess increases in the same degree as in the Perutz process. Therefore, this method is not suitable for concentrated duplicates, although it may be used with success for amateur film. See references. W. R. Ecker and C. E. Ives.

ASD 114 DETAILING LITERATURE CLASSIFICATION

ANTONOV, S.M.; MARKHILEVICH, K.I.

[How pictures appear on film] Kak pojavlyatsia na plenke  
izobrazhenie. Moskva, Goskinoizdat, 1950. 61 p. (MIRA 10:11)  
(Cinematography)

ABSTRACT, 5

Kinoplenka I yeye obra'totka. (The cinematographic film and its processing, b.)  
S. M. Antonov, V. L. Zelikman (I) K. I. Markhievich. Moskva, Goskhdizday, 1950.  
270 p. illus., diagra.  
Cataloged from abstract.

Introduction refers to the development of USSR's film industry generally, and especially to the development of new procedures and methods in connection with the possibility of a complete change in the presently existing technological procedures of manufacturing and treatment of cinematographic films (Methoo N. I. Kirillov, M. Yu. Deverdeyev and N. W. Kirillova)

KIBIL'OV, N.I.; ANTONOV, S.M.

[Color photography processes] *Protsessy tsvetnoi fotografii.*  
Moskva, Goskinoizdat, 1951. 154 p. (MLRA 7:7)  
(Color photography)



USPENSKIY, V.I.; ANTONOV, S.M.

Methods for the solution of duplicating color films. Usp.nauch.fot.  
2:155-159 '54. (MIRA 7:5)  
(Color photography)

ANTONOV, S.M.; BUKIN, Yu.I.

Review of objective lighting adjustment methods in subtractive color  
film printing processes. *Usp.nauch.fot.* 2:160-165 '54. (MLRA 7:5)  
(Color photography--Films)

INTONOV, S.M.

Administrative Staff Structure Handbook for  
Section 21  
Material M. J. White

ANTONOV, S.

Developing with two solutions. Sov. foto 17 no.9:47-49 S 157.  
(Photography--Developing and developers) (MIRA 10:9)

ARTYUSHIN, L.F.; SHUBINA, G.Ye.; ANTONOV, S.M.; KIRILLOV, N.I.; LEVITAN,  
A.Yu.; MIKOSHA, V.V.; PLUZHNIKOV, B.F.; IQFIG, Ye.A., kand.tekhn.  
nauk, red.; TELESHEV, A.N., red.; CHICHERIN, A.N., tekhn.red.

[Color photograph] TSvetnaisa fotografiia. Pod red. E.A.Iofisa.  
Moskva, Gos.isd-vo "Iskusstvo," 1958. 208 p. (Biblioteka foto-  
liubitelia, no.12) (MIRA 12:4)

(Color photography)

ANTONOV, S.M.; DVIGUBSKIY, G.O.

New developer for positive films. Tekh.kino i telev. 4 no.4:45-52  
Ap '60. (MIRA 13:9)

1. Nauchno-issledovatel'skiy kinofotoinstitut "Nosfil'm."  
(Photography--Developing and developers)

ARTYUSHIN, L.F.; SHUBINA, G.Ye.; ANTONOV, S.M.; KIRILLOV, N.I.;  
LEVITAN, A.Yu.; MIKOSHA, V.V.; FLUZHNIKOV, B.F.; IOFIS,  
Ye.A., kand. tekhn.nauk, red.; FOMIN, A.A., red.; CORINA,  
V.A., tekhn. red.

[Color photography] TSvetanaia fotografiia. Izd.2., ispr. 1  
dop. Pod red. E.A.Iofisa. Moskva, Iskusstvo, 1961. 228 p.  
(Biblioteka fotoliubitelia, no.12) (MIRA 16:5)  
(Color photography)

ANTONOV, S. M.

S/560/61/000/009/001b/009

AUTHORS: Antonov, S. M., K. S. Bogomolov, N. I. Kirillov, N. S. Cvechkis, and B. I. Uspenskiy

TITLE: Photographic processes applied in the first photography of the far side of the moon

PERIODICAL: Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli, no. 9, 1961, 20-29

TEXT: Both ground and onboard photographic processes were used to obtain the first images of the far side of the moon. The main task lay in bringing out to the maximum degree the details of objects surveyed. The numerical value of the contrast coefficient of the ground negative was close to 1; for the ground negative it was of the order of 0. The dosage of relativistic particles on the flight to the moon was of the order of  $10^7$  particles/cm<sup>2</sup>. Theoretical computations and experiments show that the density of film darkening caused

Card 1/3



Photographic processes applied...

S/560/61/000/009/001b/009

by the particles was - 0.04 to 0.06; the film fogging was 0.13 to 0.14. The basic requirements for the onboard photographic process were simplicity, stability, full automation, and reliability. Small-grain, heat-resistant film of average sensitivity and high resolving power, based on silver halide photoemulsions, was most suitable. A single-dish developing process, in which the film is developed and fixed simultaneously, was chosen. To preserve the necessary sensitometric indices, a viscous developing—fixing solution was used. The developing component was a new, energetic substance with high superadditive properties, while the fixing component possessed high buffering quality and a high content of fixing substance. A graphic presentation of the sensitometric characteristics of the single-dish process indicates that temperature oscillations from 30 to 50° have little effect on the characteristics of the curves. Thermostatic tests of the solution showed good conservation at  $t = 20-40^\circ$  for 15 days, i. e., 2.5 times the duration of the flight. Further processing of the film consisted in a short water wash and drying on a hot drum. All necessary sensitometric, physico-chemical, and mechanical tests were made on a special model of the equipment

Card 2/3

Photographic processes applied...

S/560/01/000/009/001b/000

for film processing. The ground-station process consisted in the recording of the image, in the form of radio signals sent from the station, on photographic film and subjecting the film to chemical processing. Low-concentrating, slow-operating leveling developers were specially made. The development of test negatives made it possible to establish processing regimes. Sets of positives and double negatives, obtained from each frame, served as initial material in investigating the first images of the far side. Samples of the prints obtained are given.

Card 3/3

DMITRIYEV, Ye.A.; ANTONOV, S.N.

Lomonosov Lectures in the Section of Agriculture and Biology. Vest.  
Mosk.un.Ser 6: Biol., pochv. 15 no.3:76-78 My-Je '60.

(MIRA 13:7)

(Agriculture)

(Physiology)

ANTONOV, S. N.

AUTHOR: Antonov, S.N., Engineer 135-58-5-11/17

TITLE: Ultrasonic Inspection of Welded Structures at the Leningrad Metal Plant (Ul'trazvukovoy kontrol' svarnykh konstruksiy na Leningradskom metallicheskom zavode)

PERIODICAL: Svarochnoye Proizvodstvo, 1958, Nr 5, pp 34 - 36 (USSR)

ABSTRACT: After 1956, the Leningrad Metal Plant introduced the ultrasonic inspection method for thick welded seams, and uses the "UZD-7N" impulse-defectoscope of TsNIITMASH design with a set of prismatic feelers with 30, 40, and 50° input angle of ultrasonic oscillations. The article gives general information on the method, including the oscillation frequencies and feeler angles suitable for different metal thickness. Ultrasonic inspection of cast-welded structures of carbon and low-alloy steel was introduced at the plant in 1957. A special TsNIITMASH defectoscope was used. As practical examples of application, there is mentioned a fault revealed in 70-107 mm depth from the surface in a welded joint of a cast-welded stator for the Stalingrad Hydraulic Power Plant (Stalingrads-kaya GES), and two cracks in 60 mm depth in circular welds

Card 1/2

135-58-5-11/17

Ultrasonic Inspection of Welded Structures at the Leningrad Metal Plant

on a rotor for the Gyumushskaya GES.  
There are 5 figures.

AVAILABLE: Library of Congress

Card 2/2

8000

29771  
S/194/61/000/006/057/077  
D201/D302

AUTHORS: Medvedev, V.A. and Autonov, S.N.

TITLE: Applying ultrasonic and gamma defect detection to the control of welded structures, forgings and castings

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1961, 17, abstract 6 E120 (V sb. Nekotoryye vopr. tekhnol. proiz-va turbin (Tr. Leningr. metallich. z-da, no. 7), M.-L., 1960, 377-388)

TEXT: The results of investigations with ultrasound penetration and gamma defect detection, as applied to the control of weldings, castings and combined structures are considered. The defect detector УЗМ-7Н (UZD-7N) of the TsNIITMASH with prismatic probes was used, with inlet angles between 30 and 50°. The experiments were carried out at 2.5 (for welded seams up to 150 mm thick) and 1.8 mc/s. The sensitivity of the instrument for a given depth of pene- ✓

Card 1/2

2977.  
S/194/61/000/006/057/077  
Applying ultrasonic and gamma defect... D201/D302

tration was adjusted using a standard with side apertures 2, 2.5 and 3 mm. The welded castings, having a coarse crystal structure, were investigated for the effect of ultrasonic frequency and cleanliness of the contact surface of the specimen. The possibility of determining the character of the defect from the pulse shape at the CRT screen varying the probe displacement or rotation is discussed. Recommendations are given on the suitability of steam turbine plates on the basis of the ultrasonic control results. The equipment is described together with the methods of controlling weldings and castings by means of gamma-rays. 14 figures. [ Abstracter's note: Complete translation ]

Card: 2/2

S/191/60/000/008/012/014  
B004/B056

AUTHOR: Antonov, S. N.  
TITLE: Measurement of the Electrical Resistance of Plastics by  
the Electrometer Method  
PERIODICAL: Plasticheskiye massy, 1960, No. 8, pp. 59-60

TEXT: The author developed an apparatus which makes it possible to measure the surface resistance  $Q_s$  and volume resistance  $Q_v$  of 2 mm thick plastic samples up to  $1 \cdot 10^{18}$  ohms. As a measuring instrument, a single-filament electrometer with a 1 - 4  $\mu$  thick platinum filament is used. Fig. 1 shows the basic circuit diagram of the electrometer, Fig. 2 the entire circuit diagram of the apparatus, and Fig. 3 the special circuit diagrams for measuring  $Q_v$  and  $Q_s$ . Equations are given for calculating  $Q_v$  and  $Q_s$  on the basis of the measurements. Shape and dimension of the electrodes and samples are to be selected according to ГОСТ 6433-52 "Tverdyye dielektriki" (GOST 6433-52 "Solid Dielectrics"). The author thanks S. B. Ratner and G. O. Tatevos'yan for their assistance. There are

Card 1/2



Measurement of the Electrical Resistance  
of Plastics by the Electrometer Method

S/191/60/000/008/012/014  
B004/B056

3 figures.

Card 2/2

ANTONOV, S.N.

Measurement of the electric resistances of plastics by means of  
an electrometer. Plast. massy no. 8/59-60 '60. (MIRA 13:10)  
(Plastics--Electric properties) (Electrometer)

ANTONOV, S.N.; TATEVOS'YAN, G.O.

Automatic programmed regulator of the rate of the electric heating  
of instruments and apparatus. Plastmassy no.6:46-47 '61.

(MIRA 14:5)

(Electric heating) (Temperature regulators)

ANTONOV, S.N.; TATEVOS'YAN, G.O.

Circuit diagram of a setup for determining specific volumetric and surface electric resistances. Plast.massy no.11:55-57 '61.  
(MIRA 14:10)

(Electric measurements)

ZENZIN, Viktor Nikolayevich; FRENKEL', Leonid Davydovich. Prinsipal  
uchastiye ROZENBLYUM, V.I.; ANTONOV, S.N., inzh., retsenzent;  
OKERBLOMA, N.O., doktor tekhn. nauk, prof., red.; BOCHAROVA,  
Ye.G., red. izd-va; SHCHETININA, L.V., tekhn. red.

[Welded elements for steam and gas turbines] Svarnye konstruksii  
parovykh i gazovykh turbin. Pod red. N.O.Lkerbloma. Moskva,  
Mashgiz, 1962. 222 p. (MIRA 15:7)  
(Electric welding) (Gas turbines)  
(Steam turbines)

ANTONOV, S.N.; FAYNSHTEYN, Ye.B.

Methods of testing the electric properties of thin films of  
polymeric materials. Plast. massy no.11:48-50 '63.  
(MIRA 16:12)

ANTONOV, S.N.; FAYNSHTEYN, Ye.B.; ANDRIANOVA, N.V.

Electric properties of a polyethyleneterephthalate film. *Plast.massy*  
no.12:51-52 '63. (MIRA 17:2)

ANTONOV, S.N., inzh.

Improving the efficiency of the welded construction of turbines.  
[Trudy]LMZ no.11:72-80 '64. (MIRA 17:12)



ANTONOV, S.N., inzh.; SHCHERBAKOV, V.V., inzh.; KHOROBYKH, G.A., tekhnik

Technology of preparing large welded sections for the construction of hydraulic turbines. [Trudy]LMZ no.11:140-153 '64. (MIRA 17-12)

ANTONOV, S.N., inzh.; SHCHERBAKOV, V.V., inzh.; MARKOV, N.I., tekhnik

Manufacture of welded diaphragms. [Trudy]LMZ no.111299-314 '64.  
(MIRA 17:12)

ANTONOV, S. N., inzh.

Manufacturing welded structures of aluminum-magnesium alloys. [Trudy]  
IMZ no. 11:342-347 '64. (MIRA 17:12)

1. US033-07 247(3)/247(m)/1 10P(c) 10P

ACC NR: AP6023065

(A)

SOURCE CODE: UR/0191/66/000/004/0038/0040

AUTHOR: Antonov, S. N.; Gurman, I. M.; Kovriga, V. V.; Lus'ichevkin, G. A.

37  
36  
B

ORG: none

TITLE: Electric properties of epoxy resins of different molecular weight

SOURCE: Plasticheskiye massy, no. 4, 1966, 38-40

TOPIC TAGS: epoxy plastic, dielectric property, dielectric loss, molecular weight

ABSTRACT: The authors studied the effect of molecular weight, temperature, and time of curing on the angle of dielectric losses ( $\text{tg } \delta$ ), dielectric permeability ( $\epsilon$ ), and specific electric volume resistivity ( $\rho_v$ ) of epoxy resins ED-5, ED-6, and ED-1 (see Table 1), obtained by condensation of diphenylolpropane and epichlorohydrin. Dielectric properties of the noncured resins improved with an increase in molecular weight and as their curves of  $\text{tg } \delta = f(t)$  and  $\epsilon = f(t)$  shifted toward higher temperatures. The values of dielectric properties of cured resins decreased with an increase in molecular weight. The curing conditions of the epoxy resins affected  $\text{tg } \delta$  more than  $\epsilon$  or  $\rho_v$ . Orig. art. has: 5 fig. and 1 table.

Card 1/2

UDC: 678.643:425.01 : 537.226

L 03033-67

ACC NR: AF6023065

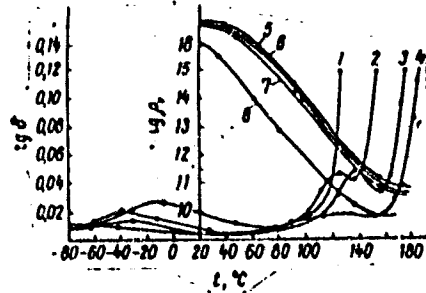
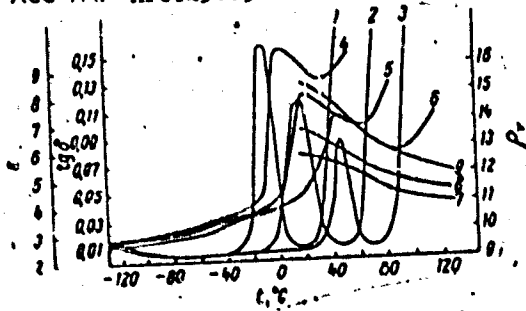


Figure 1. Dependence of  $tg \delta$  (1-3),  $\epsilon$  (4-6), and  $\rho_v$  (7-9) of the noncured resins on temperature; 1, 4, 7-ED-5 resin; 2, 5, 8-ED-6 resin; 3, 6, 9-ED-L resin

Figure 2. Dependence of  $tg \delta$  and  $\rho_v$  of the cured resins on curing temperature;  $tg \delta$ : 1-ED-5; 2-ED-L; 3-ED-6; 4-ED-5;  $\rho_v$ : 5-ED-5; 6-ED-6; 7-ED-L; 8-ED-5; 1 and 8 were cured by diethylenetriamine and 2, 3, 4, 5, 6, and 7 by maleic anhydride

Table 1. Characteristics of epoxy resins

Resin	Concn., %	Mol. weight	Melting temp., °C
ED-5	20.6	350-400	-8-0
ED-6	16.3	450-550	8-15
ED-L	9.3	800-1000	40-60

SUB CODE: 20, 11/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 002

Card 2/2

~~AMRGOV~~, Stepan Petrovich; MNYERSON, Vladimir Pavlovich; MATLIN, O.M., red.;  
ANDREYEVA, L.S., red.isd-va; LAVRENOVA, N.B., tekhn.red.

[Computing installations with high pile grating] Raschet sooruzhenii  
s vysokim svainym rostverkom. Moskva, Izd-vo "Morskoi transport,"  
1957. 158 p. (MIRA 11:3)  
(Piling (Civil engineering))

TARNOVSKIY, I.Ya.; ANTONOV, S.P.; ODINOKOV, Yu.I.; KUSTOBAYEV, G.G.;  
SYCHKOV, B.D.

Ingot rolling in the 1150 slabbing mill. Stal' 22 no.8:720-727  
Ag '62. (MIRA 15:7)

1. Ural'skiy politekhnicheskiy institut, Ural'skiy institut  
chernykh metallov i Magnitogorskiy metallurgicheskiy kombinat.  
(Rolling (Metalwork))

ANTONOV, S.P., inzh.; BOYARSHINOV, M.I., prof.; UZIYENKO, A.M., inzh.;  
KUSTOBAYEV, G.G., inzh.; LABINOVICH, Ye.I., kand.tekhn.nauk;  
RYABCHIKOV, F.D., inzh.

Improving the quality of rolled metal surfaces made of large  
ingots. Stal' 22 no.8:728-732 Ag '62. (MIRA 15:7)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy  
gornometallurgicheskiy institut.

(Steel ingots)  
(Rolling (Metalwork)---Quality control)



LIIOVCHENKO, Nikita Vasil'yevich; ANTONOV, Sergey Pavlovich;  
BOYARSHINOV, Mikhail Ivanovich; PLOTNIKOV, Petr Ivanovich;

[Production of steel plate] Proizvodstvo tolstolistovoi  
stali. Moskva, Metallurgiya, 1964. 306 p. (MIRA 17:12)

S/073/60/026/005/015/019  
B004/B063

AUTHORS: Zosimovich, D. P., Antonov, S. P.  
TITLE: Stress of Electrodeposits of Chromium Under Different  
Conditions of Electrolysis  
PERIODICAL: Ukrainskiy khimicheskiy zhurnal, 1960, Vol. 26, No. 5,  
pp. 663 - 668

TEXT: The purpose of the present work was to study the effect of the stress of electrodeposited chromium upon the development of cracks and surface defects. Flexible steel cathodes 0.1 mm thick, which had been varnished on one side, were used for the purpose, and M. L. Pertsovskiy's method was applied. The experimental conditions were a  $\text{Cr}_2\text{O}_3$  concentration of 100-600 g/l, a current density of 10-100 a/dm<sup>2</sup>, and a temperature of 22°C. The authors determined: 1) the weight of the cathode before and after the experiment; 2) the deflection  $z$  of the free end of the cathode; 3) the function  $z = f(t)$ ; 4) the function  $t = f(\mu)$ , where  $\mu$  is the thickness of the deposit expressed in microns; 5) the function

Card 1/2

ZOSIMOVICH, D.P.; ANTONOV, S.P.

Preparation of chromic acid from chromium hydroxide.  
Ukr.khim.shur. 28 no.8:987-990 '62. (MIRA 15:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.  
(Chromic acid)  
(Chromium hydroxide)

ZOSIMOVICH, D.P.; ANTONOV, S.P.

Physicochemical study of polychromate electrolytes. Zhur.prikl.-  
khim. 35 no.12:2791-2793 D '62. (MIRA 16:5)  
(Chromates) (Electrolytes)

ZOSIMOVICH, D.P.; ANTONOV, S.P.; BUDKEVICH, V.V.

Anodic oxidation in chromichromate electrolytes. Ukr.khim.zhur.  
29 no.6:642-647 '63. (MIRA 16:9)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.  
(Chromium compounds) (Oxidation, Electrolytic)

ANTONOV, S.P.; ZOSIMOVICH, D.P.

Use of a rotating disk electrode in the study of anodic  
oxidation of chromium. Ukr. khim. zhur. 29 no.10:1111-1112  
'63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

ZOSIMOVICH, D.P. [Zosymovych, D.P.]; ANTONOV, S.P.

Preparation and regeneration of chromic acid by anodic oxidation  
of chromium hydroxide. Khim.prom. [Ukr.] no.1:10-12 Ja-Mr '64.  
(MIRA 17:3)

ACQUISITION NO. APR905151

BOOK IDENTIFICATION

8/

Litovchenko, Nikita Vasil'yevich; Ankersky, Sergey Pavlovich; Boyarskiy, Mikhail  
Frankovskiy, Vladimir

TOPIC TAGS: rolling mill, sheet metal, automation, steel

PURPOSE AND COVERAGE: The book describes experience in the rolling of steel  
plate in Soviet metallurgical plants. It covers the design and operation  
of plate rolling mills. It considers in detail the heat of ingots and slabs,  
production of bimetallic sheet, equipment automation and the best quality control

Author's address: [illegible]

Book number: [illegible]

Card 1/2



I 52934-65

ACCESSION NO. AM5005251

- Ch. I. Plate rolling mills -- 7
- Ch. II. Initial materials and finished steel sheet -- 121
- Ch. III. Heating equipment and metal heating before rolling -- 205
- Ch. IV. Principles of overall automation of steel rolling -- 211
- Bibliography -- 306

NO REF SOV: 055

OTHER: 000

L 57523-65 EWT(a)/EWT(x)/XWA(G)/EWP(v)/EWP(R)/EWP(h)/EWP(t)/EWP(b)/EWP(l)/

SWA(G) Pt-4 JD/HW

ACCESSION NR: AR5013007

UR/0137/85/000/004/D009/D010  
021.771.001

SOURCE: Ref. zh. Metallurgiya, Abs. 46

34  
D

AUTORS: Yanovskiy, I. Ya.; Odlozhev, Ya. I.; Antcov, S. I.; Pecherov, A. A.;  
Usiyenko, A. M.; Kuntobayev, G. G.; Chichigin, V. A.; Kyabchikov, F. D.; Sychkov,  
B. D.

TITLE: Conditions for rolling large ingots on a slab mill

CITED SOURCE: In: Metal'skogo n.-i. In-ta Chern. met., v. 3, 1964, 187-181

TOPIC TAGS: metal rolling, slab mill, rolling mill

TRANSLATION: The 1150 slab mill for rolling heavy UNS-217 ingots was studied. It was found that the degree of reduction could be increased while the number of passes was reduced. Primary studies were made for rolling heavy ingots in 11 passes. These were repeated and improved on. It was found that the best

results improvement is reached by 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

Card 1/2

L 57523-65

ACCESSION NR: AR5013007

parts. It was found that motors with vertical rolls with a power of 4000-4500 kw may be installed on new mills. This will make rolling without side passes possible with intense compression of the side edges of slabs in the vertical rolls and will improve the quality of the rolled product. The investigations have not exhausted the possibilities of the 1150 mill. M. Yudina.

SUB CODE: IG, MM

ENCL: 00

Card

NT-  
7/7

DIKHOV, Boris Borisovich; LITVINENKO, N. N. (Nikolai Vasiliyevich),  
YERMOGLAYEV, Vladimir Aleksandrovich; ALIKOV, Sergey  
Evgenyevich

[Potentialities in rolling mill operations] Rezervy produktiv-  
nogo proizvodstva. Moscow, Metallurgiya, 1965. 131 p.  
(MIRA 18:7)